



# FLOOD MANAGEMENT Meeting Summary PLANNING PROGRAM Upper San Joaquin Regional Flood SAFE Management Actions Work Group **Meeting #2**

September 23, 2010, 9:00 am - 1:00pm Merced County Farm Bureau Location: 646 S. State Highway 59 Merced, CA, 95341

# **WORK GROUP ATTENDANCE:**

Name	Organization	Status
Randall Anthony	Merced Irrigation District	Member
S. Leo Capuchino	City of Mendota	Member
Sarge Green	CA Water Institute, CSU Fresno	Member
Mari Martin	Resource Management Coalition Member	
Keith Seligman	Kings River Conservation District Member	
John Shelton	CA Department of Fish and Game Member	
Erik Vink	Trust for Public Land	Member
Tyler Willsey	US Fish and Wildlife Service	Member
Mike Inamine	California Department of Water Resources (DWR)	DWR Executive Sponsor
Jim Eto	DWR	CVFPO**
Elizabeth Hubert	DWR	FESSRO***
Brian Smith	DWR	DWR Lead
Ernie Taylor	DWR	
Eric Clyde	MWH	Technical Lead
Pam Jones	Kearns & West	Team, Facilitator
Ben Gettleman	Kearns & West Facilitation Support	

<sup>\*</sup> Central Valley Flood Management Planning

#### Absent:

Margit Aramburu	University of the Pacific, Natural Resources Institute Member	
John Cain	American Rivers Member	
Reggie Hill	Lower San Joaquin Levee District	Member
Kellie Jacobs	County of Merced Member	
Dave Koehler	San Joaquin River Parkway and Conservation Trust Member	
Jerry Lakeman	Fresno Metropolitan Flood Control District	Member

<sup>\*\*</sup> Central Valley Flood Planning Office

<sup>\*\*\*</sup> FloodSAFE Environmental Stewardship and Statewide Resources Office

Bill Luce	Friant Water Authority	Member
Paul Romero	DWR, Flood Plain Management Division	Member
teve Stadler Kings River Conservation District		Member

### **Observers:**

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## WORK GROUP HOMEWORK/ACTION ITEMS

• Send comments on management actions to Eric Clyde (<u>Eric.S.Clyde@us.mwhglobal.com</u>) for incorporation into the Management Actions report.

# **ACTION ITEMS: PROGRAM TEAM**

- 1. Ben Gettleman, Kearns & West, will send a draft meeting summary to the work group.
- 2. Pam Jones, Kearns & West, will contact work group members who were not able to attend the meeting to gauge their interest in participating in the regional objectives subcommittee.
- 3. Kearns & West will provide further direction to the "Regional Objectives" Subcommittee and assist in organizing and facilitating the one or two conference calls.

**GROUP RECAP** (meeting highlights for use by Work Group partners in their communications)

The Upper San Joaquin Regional Management Actions Work Group (Work Group) of the Central Valley Flood Management Program (CVFMP) continued its work on September 23, 2010 with the following activities:

- Reviewed outcomes of Management Actions Workshops and process for revising Management Actions:
- Discussed regional applicability of Management Actions; and
- Developed an initial list of Regional Objectives and identified a subcommittee to add to and refine the list (to take place between meetings 2 and 3).

The purpose of the Work Group is to assist DWR in framing management action categories and providing advice on the general approach to incorporating management actions into the CVFPP. The Work Group provides an additional level of review, with a particular eye to regional significance, on the input received during CVFPP management actions public workshops. The Upper San Joaquin Regional Management Actions Work Group is one of five regional work groups for the CVFMP.

# **MEETING GOALS**

- 1. Review outcomes of Management Actions Workshops and process for revising Management Actions
- 2. Introduce the process and logic for building solution sets
- 3. Discuss regional applicability of Management Actions
- 4. Initiate discussion of "regional objectives" and organize subcommittee to continue development of regional objectives (to take place between meetings 2 and 3)

#### **SUMMARY**

# **Welcome and Greetings**

Pam Jones, meeting facilitator, welcomed the Work Group participants and reviewed the meeting purpose, objectives, and agenda.

# **Opening Remarks**

Mike Inamine, DWR Executive Sponsor, welcomed the meeting attendees and thanked them for their participation. Mr. Inamine provided an overview of the 2012 CVFPP, which will provide the framework for the 2017 plan. Phase 1 of the CVFPP planning effort focused on defining regional conditions, Phase 2 (the current phase) focuses on the identification of management actions, and Phases 3 and 4 will address regionally appropriate solution sets and systemwide solutions sets. Mr. Inamine added that the focus of the day's meeting would be discussing how the CVFPP management actions apply specifically to the Upper San Joaquin region.

Mr. Inamine reported on the status of several documents currently being developed: the Flood Control System Status Report will be available in December 2010; the State Plan of Flood Control Descriptive Document will be available by the end of October 2010; and the CVFPP Progress Report will be available by the end of 2010. In addition, the programmatic Environmental Impact Report (EIR) for the CVFPP is proceeding, and the Notice of Preparation (NOP) and corresponding scoping meetings are planned for fall 2010. Finally, Mr. Inamine noted that the Management Actions Report and the second Interim Progress Report (IPS2) will be released in early November 2010, prior to the third meeting of the Regional Management Actions Work Groups (RMAWGs).

Mr. Inamine reported that many Work Group members had asked DWR about its position on vegetation management/removal on levees, per U.S. Army Corps of Engineers requirements. Mr. Inamine stated that in terms of developing and implementing the CVFPP, DWR does not view stripping vegetation from existing levees as a viable option, and that implementing a regional variance would likely be the most viable path forward. Mr. Inamine added that the CVFPP will include a regional variance policy that allows state and local agencies to comply with the USACE vegetation guidelines in the long-term, but does not force them to commit scarce resources to levee vegetation management in the near-term. Eric Clyde, MWH, noted that conversations and negotiations regarding vegetation on levees are outside the scope of the CVFPP.

Comment: The San Joaquin River Restoration Program (SJRRP) may create major modifications to certain sections of the San Joaquin River, including the section from the Chowchilla Bypass to the Mendota Pool, and Reaches 4a and 4b. SJRRP is making progress and this will have major impacts on flood control planning.

# Outcomes of Phase 2 Management Actions Workshops, Roadmap for Phase 2

Jim Eto, DWR Central Valley Flood Planning Office, provided an overview of management actions, noting that the RMAWGs are now focusing on the regional applicability of management actions for the CVFPP. Mr. Eto reviewed key outcomes from the Phase 2 Management Actions Workshops and also reviewed the Phase 2 timeline. Eric Clyde added that many urban areas are making flood improvements to meet 100-year or 200-year FEMA standards, and, as a result, the workshop focusing on urban areas wasn't as highly attended.

Q: How much funding has DWR committed to urban areas?

A: Several hundred million dollars has been committed for planning and construction projects in urban areas.

Q: How are the urban areas following the integration concept to make their projects multi-benefit?

A: For Early Implementation Projects (EIP), setback levees need to be considered since urban areas are ahead of the CVFPP. If there are two alternatives, the setback levee option must be pursued to maintain the possibility of creating a multiple-benefit project. The State is allowing EIP projects to move forward but only after they have been demonstrated as "no regrets" projects that consider multiple benefits.

# Process and Logic for Building Regional and Systemwide Solution Sets

Eric Clyde, MWH technical lead, presented on developing regional and systemwide solution sets. He noted that during Phase 3 of the CVFPP development process the focus will be on regional solutions, and during Phase 4 the focus will be on systemwide solutions. Mr. Clyde added that some management actions may both benefit a local area and have systemwide benefits and that it will be important to identify which area(s) benefit to determine who will be paying for the project. Identifying the beneficiaries will become part of the financing strategy for the 2012 CVFPP.

Q: If there are downstream, negative impacts, will the upstream areas be expected to pay to mitigate the damage/risk?

A: Yes, the concept of financing will consider both positive and negative impacts, and this will need to be taken into account in the financing strategy.

Mr. Clyde presented the CVFPP Solution Sets, noting that four approaches have been developed:

- **Restore SPFC Design Approach**, with a focus on improving the reliability of the existing system back to design conditions. This approach would likely provide varying levels of flood protection.
- Critical Public Safety Approach, with a focus on addressing aspects of the system that represent critical threats to public safety.
- Floodplain Management Approach, with a focus on addressing public safety, but instead of
  focusing on fixing the system, it would focus more on the consequences of flooding and on nonstructural changes.
- **Multi-Benefit Approach**, a focus on making major modifications to the system that provide multiple benefits.

Mr. Clyde noted that the solutions sets that ultimately move forward will incorporate components of each of the four approaches and that identifying the four current approaches allows for comparison and the identification of tradeoffs. For the initial recommendation to the Central Valley Flood Protection Board (CVFCB) in 2012, the intent is to identify common elements and actions across the different approaches (i.e., "no regrets" actions). He also added that the Solution Sets graphic of different sized bars is intended to be conceptual and relative and is not based on actual data.

# **Discuss Regional Applicability of Management Actions**

Work group members participated in filling out the Regional Applicability of Management Actions worksheet for which the group was asked to provide feedback on the applicability of the management action categories and subcategories to the Upper San Joaquin region. Mr. Clyde clarified that during the day's meeting the focus would be on place-based management actions (i.e., not systemwide or outside the scope of the CVFPP), and that regional solutions will be incorporated when systemwide solutions are being discussed.

The results of the exercise are captured below:

Note: The work group concluded that all of the management action categories and subcategories applied to the Upper San Joaquin region.

### Additional Floodplain & Reservoir Storage

> Floodplain Storage (transitory storage)

# Constraints:

Topography constraints – there are limited areas with suitable drainage conditions.

• There are limited large areas connected to historical floodways that are not already impacted by urban development and/or agricultural infrastructure.

# Compatibilities:

- SJRRP is considering large areas to connect to the floodplain. This has not yet come down to the landowner-level.
- Wildlife refuges. Some areas, such as Mendota Pool and the Kings River, are already being used as such. As the San Joaquin River's flows are restored, additional storage may be possible in some places.
- Retired land south of Mendota should be considered.
- Some of the Kings River flows could be captured if the necessary easements can be secured. This could cover about 42,000 acres.
- 12,500 acre-feet is leased from Merced Irrigation District to the Merced National Wildlife Refuge.
- Grassland Water District Wetlands. There may be opportunities to store additional water into these areas, as it is an historic floodplain. Grasslands is privately owned and maintains a wildlife refuge on the land.
- Private land opportunities. Duck clubs are private businesses, so they can be challenging to work with in terms of floodplain designations.
- Upland areas have additional storage when there is more water coming through.

# Additional Floodplain & Reservoir Storage

# Reservoir Storage

#### Constraints:

None identified

#### Compatibilities:

- Temperance Flat
- Madera Water Bank
- Lake McClure has 75,000 acre-feet of additional storage.
- Hensley Lake
- Westlands Water District
- Flood diversions on Bear Creek, Mariposa Creek and Black Rascal Creek (Merced County Stream Group project)
- The Tulare Lake bottom could take more of the Kings River water.
- Mill Creek off the Kings River
- Fresno Slough. Areas that have transitory storage capacity are useful for reducing peaks.
- Tulare Basin Wildlife Partners
- Southern California Edison has a potential project to raise the Mammoth Pool to hold back snow melt runoff.

## **Storage Operations**

# Constraints:

 Connectivity. Integrated Regional Water Management (IRWM) is looking to improve connectivity to promote conjunctive use.

#### Compatibilities:

- Lake McClure
- Use the Forecast Coordinated Operations (FCO) program as done on the Feather and Yuba Rivers to get more water through the system
- Madera Groundwater Bank
- Anything connected to the Friant-Kern Canal can be taken.

# Other Comments/Questions:

- Don Pedro Reservoir could be operated differently to hold more storage.
- Flood releases are viewed as wasted water. There is political resistance to providing water transfers to southern California, and the water is wasted as a result.

### **Flood Protection System Modification**

Reduce Physical Flow Constrictions

### Constraints:

- Downstream impacts
- · Vegetation in channels

## Compatibilities:

- SJRRP and its goal to reach designated flow requirements. SJRRP could go further in reducing flow
  constrictions if there was a flood component in addition to the restoration component. This could be a
  compatibility or a constraint since SJRRP's restoration goal could compete, or be compatible, with
  flood protection.
- Mendota Pool is restricted on how much it can take from the Kings River without flooding other areas.
- Channels in Madera County, including Ash Slough and Berenda Slough

# **Flood Protection System Modification**

Bypasses

#### Constraints:

None identified

## Compatibilities:

- Some alternatives for SJRRP include potential bypasses of Mendota Pool
- Mariposa Bypass (Reach 4b) is identified as an alternative in SJRRP
- Kings River Bypass near San Mateo Road
- Bypasses might be under consideration for Bear Creek and Black Rascal Creek

# **Flood Protection System Modification**

Existing Levees (raise, restore, or improve)

#### Constraints:

• CVFPP is on a different time schedule than SJRRP.

#### Compatibilities:

- Firebaugh. Existing levees are not in the system. Chowchilla Bypass was prioritized over Firebaugh for construction of levees.
- Areas on the river that don't meet planned flow (pinch points), if improved would allow the river to carry more water.

#### Other Comments/Questions:

- Flood control was considered relatively late in the SJRRP planning process, but it's clear that much of
  the system is deficient in terms of providing adequate performance. There should likely be compatible
  actions between flood protection and restoration to address issues like seepage, erosion, and levee
  stability.
- SJRRP is mainly considering what needs to be done to accommodate restoration flows, not flood flows. There are elements that could be combined, however.
- SJRRP has its own schedule that forces it to press ahead. Decisions made for SJRRP need to be made relatively quickly and these may not match the goals of the CVFPP.

# **Flood Protection System Modification**

# > Setback Levees and New Levees

#### Constraints:

None identified

#### Compatibilities:

- SJRRP is considering restoring riparian habitat with setback levees. There are questions about how this would affect agricultural habitats and lands.
- There are two culverts on Los Banos Creek that constricted flow during the 1998 flood season.
- The Westside IRWM includes setback levees to capture water, including West Stanislaus. Projects from the Westside IRWM should be included in this list.

## **Flood Protection System Modification**

### Ring Levees

## Constraints:

None identified

#### Compatibilities:

- Gilmore
- Dairies
- Mendota
- Firebaugh
- Merced treatment plant (disposal ponds) on Bear Creek
- Mendota, Firebaugh and Laton wastewater facilities
- Left bank of the Chowchilla Bypass near Firebaugh. If the levee breaks the consequences will be severe.
- Eastside Storage Reservoir

#### Other Comments/Questions:

- Flood protection actions in a rural community like Firebaugh might reduce the need for project levees in other parts of the system.
- There may be opportunities to protect specific areas either because of their value or the potential impacts of flooding.
- Mendota may need a short reach of additional levee.
- The City of Huron gets flooded from Arroyo Pasajero, but that's not included in this plan. Geologically, Arroyo Pasajero is connected to the San Joaquin River, but more likely it flows into the Tulare Lake Basin.

#### **Operation and Maintenance**

#### Dredging

### Constraints:

None identified

#### Compatibilities:

- Mendota Pool
- Chowchilla bypass
- SJRRP is investigating dredging (taking out sand) below Washington Road where there are groundwater impacts.

#### Other Comments/Questions:

Sediment removal ("dry dredging") should be included in this category.

### **Operation and Maintenance**

## > Vegetation Management

## Constraints:

- Permitting difficulties
- If vegetation management is not done correctly, it can create more problems downstream.
- Protected species make some areas inaccessible for vegetation management.

#### Compatibilities:

- Linking SJRRP with flood management since they share compatible interests
- Streamline the permitting process. Make the process more logical and reduce the number of hoops.
- San Joaquin River Partnership is beginning to discuss invasive species control.
- The challenge of invasive species such as Scarlet Wisteria, which is spreading. Arundo and Bamboo are also problems.

### Other Comments/Questions:

 SJRRP must provide habitat for salmonids, which means there are vegetation management issues to deal with; the issue of invasive species is a big part of this. This will be an ongoing O&M consideration, and it involves upstream areas. SJRRP will need to determine how it plans to address potential flood problems taking place upstream.

## **Operation and Maintenance**

#### Bank Stabilization

#### Constraints:

- Inadequate access to bank stabilization materials; limited space to stockpile materials
- Facilities that can produce materials are shrinking, and mining permits are expiring.

#### Compatibilities:

- Linking SJRRP with flood management since they share compatible interests
- Chowchilla Bypass
- Mendota
- Firebaugh
- Store materials ahead of time as much as possible

#### Floodplain Management

#### Floodproofing

# Constraints:

County general plans and building codes might not be compatible with floodproofing efforts.

#### Compatibilities:

- Individual farm operations and associated industries such as grain elevators
- Dairy operations could move their animal/building operations within their own properties, or move to a different location.

## **Ecosystem Restoration**

#### Constraints:

 SJRRP – Reintroducing a salmon run on the main stem of the San Joaquin River may cause challenges in the future.

# Compatibilities:

- SJRRP
- Merced River restoration being conducted by DFG
- Mendota Pool restoration being conducted by DFG
- National wildlife refuges

## Other Comments/Questions:

- Floodplain management (groundwater recharge, etc.) can provide ecosystem benefits; this is taking
  place in the Tulare Lake Basin.
- There needs to be communication and education about the benefits and opportunities of ecosystem restoration. If not, there will likely be conflicts.

# **Discussion of Additional Topics**

Pam Jones asked if there were regional actions or facilities that did not fit into the categories on the worksheet.

Comment: Invasive species control directly applies to the Upper San Joaquin region, but there should be a programmatic approach. This will help address the challenge of having local agencies navigate a complicated permitting process.

# **Developing "Regional Objectives" and Subcommittee Meeting Approach**

Eric Clyde, MWH, reviewed the process of developing regional objectives, noting that regional objectives should address problems and opportunities that are specifically relevant to the region. He then introduced a set of sample regional objectives. Pam Jones then requested that the group identify initial regional objectives. The following regional objectives were identified during the meeting:

- Improve institutional support by creating a regional flood-related association for the Upper San Joaquin region. (Currently, the Lower San Joaquin Levee District is the unofficial regional overseer of flood-related issues.)
- Protect disadvantaged communities that have lower land values and are often unable to pay for flood improvements (e.g., Mendota, Firebaugh, Huron).
- Protect agricultural land use and make it reliable so farmers know what to expect regarding flooding (every 10 years, 25 years, etc) and can plan accordingly. A mapping project of cropping patterns would help inform decisions.
- Maintain a distributed flood protection system.
- Coordinate with existing programs and organizations and support local decision-making. This will allow for leveraging impacts and benefits. The Upper San Joaquin region has numerous programs that are approaching implementation (SJRRP, IRWMP) and coordination will be critical.
- Enhance regional self-sufficiency and efficiency in responding to flood events (evacuation, emergency response, planning, training and education). Follow the lead of the agriculture community's response to flooding and emergencies, which tends to be more immediate and selfsufficient and less reliant on sometimes-delayed government response.
- Inform land use planning agencies about how the CVFPP integrates with their operations and permitting. Agricultural preservation, flood management and ecosystem restoration are constraining their ability to use land. There needs to be coordination with local agencies with respect to operations and planning.
- Support and assist agencies in navigating the permitting process.

Pam Jones then provided an overview of the subcommittee's charge, noting that the subcommittee would meet once or twice before Meeting #3 to develop additional regional objectives specific to the Upper San Joaquin region. These recommendations will then be presented to the full group for consideration during Meeting #3.

#### **Recruitment of Subcommittee Members**

The following work group members volunteered to participate in the subcommittee:

- Mari Martin, Resource Management Coalition (if available)
- John Shelton, DFG (if available)
- Steve Stadler, Kings River Conservation District

The following absent work group members were recommended to participate in the subcommittee. The program team will follow up with these members to gauge their interest in participating.

- Reggie Hill, Lower San Joaquin Levee District
- Kellie Jacobs, Merced County Flood Plain Manager Administrative Engineer
- Jerry Lakeman, Fresno Metropolitan Flood Control District
- Dave Koehler, San Joaquin River Parkway and Conservation Trust

# **Next Meetings, Action Item Review, Meeting Recap**

Pam Jones provided an overview of the goals for Meeting #3, which will take place on November 10, 2010. Jim Eto complimented the group on its progress in developing regional objectives, and thanked the meeting participants for their input.